

ABSTRACT OF THE DISCLOSURE

In a semiconductor memory device which has a plurality of operation modes and can reduce a consumed electric current by carrying out the switching control of an internal signal for every operation mode by required minimum control, a control method thereof, and a control method of a semiconductor device, there are provided an address switching circuit 13 for propagating either a refresh address ADD (Ref) from a refresh counter 14 at a time of a refresh mode or an external address ADD (R/W) at a time of data-input/output mode as internal address ADD(INT), a mode discriminating circuit 11 for discriminating between a refresh operation requesting signal REQ(Ref) and a data input/output requesting signal REQ (R/W) and for outputting a mode discriminating signal M, and a switch holding circuit 12 for outputting a switch change-over signal SW in accordance with the mode discriminating signal M, and the connection of the address switching circuit 13 is switched only at a time of a mode change.